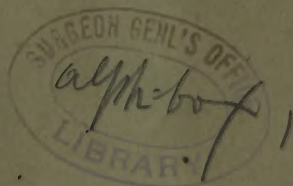


Willard (S. D.)

DR. WILLARD'S

ADDRESS.



ANNUAL ADDRESS

DELIVERED

Before the Medical Society of the County of Albany

NOVEMBER 8, 1893.

BY STEPHEN D. WILLARD, M. D.

PRESIDENT OF THE SOCIETY.

ALBANY:

MUNSELL, WILSON & STATE STREET.

1893.

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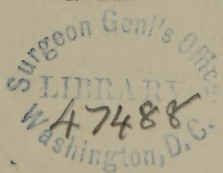
BEFORE THE

Medical Society of the County of Albany,

NOVEMBER 8, 1859.

BY SYLVESTER D. WILLARD, M. D.

PRESIDENT OF THE SOCIETY.



ALBANY:

MUNSELL & ROWLAND, 78 STATE STREET.

1859.

COMMITTEES.

The President appointed the following Committees, under the Resolution presented by Dr. Rogers at the Semi-Annual Meeting.

New Therapeutic Agents.—H. G. McNAUGHTON, NEWCOMB.

Valuable Accessions to the Materia Medica, originating with Hahnemannic Practitioners.—H. TOWNSEND.

Public Hygiene.—BAILEY, QUACKENBUSH, VANDERPOEL.

To secure Mortuary Statistics in the City of Albany.—VANDERPOEL, COGSWELL, SWINBURNE.

Medico-Legal Testimony.—FREEMAN, MYERS, CHAPIN.

Testimony at Coroners' Inquests.—WHITBECK, EDMESTON, ALEXANDER.

Management of Albany County Asylum for the Insane.—CRAIG, BAILEY.

Comparative Value of various Anæsthetic Agents, and Mode of Death from their use.—HOFF, QUACKENBUSH, FOWLER.

Medical Journalism.—OSCAR H. YOUNG, POMFRET.

Cases of Poisoning.—PORTER, CHAPIN, POMFRET.

Surgery.—Dr. H. MARCH, BABCOCK, HOFF.

Pathology.—BIGELOW, MOORE, DELAMATER.

Diseases of Women and Children.—QUACKENBUSH, LEWI.

Registration of Diseases.—ROGEES.

Diphtherite.—LEWI.

The uses of the Silver Suture.—ARMSBY.

Surgical Treatment of Prolapsus Uteri.—SWINBURNE.

Eruptive Diseases.—Drs. DELAMATER, MOORE, SHILAND.

A D D R E S S .

MR. VICE PRESIDENT AND GENTLEMEN :

It is a pleasing feature in the character of the meetings of this Society, that within the past year a greater number of voluntary communications have been presented by our members, than in any equal preceding period of our history ; and that these contributions, which have been mostly from our junior members, with the interest of an increased attendance, have aided materially in giving fresh vigor to our Institution.

Under these favorable auspices, another Anniversary has returned upon us, and we are convened for the duties it imposes. Let me congratulate you, then, fellow members, upon our present prosperity, and upon all that the future promises for the reputation, the extended influence and usefulness that awaits this already venerable Society.

In retiring now from the chair of your Presiding Officer, I desire to meet the incumbent obligation of addressing you ; but, in the attempt, I am reminded that the routine of my daily observation is not dissimilar from that of other members of the Society, so that subjects of professional interest most likely to attract my own attention could not escape that of my colleagues, nor could I reasonably expect that my own experience would add to the strength of the well defined views they have acquired and demonstrated in the sphere of their own professional engagements.

In casting about, therefore, for a topic suitable to the demands of this hour, the question has naturally arisen : How shall I render the best service to the Society within the few moments that remain for me to occupy its attention ? In reply to this inquiry I might venture to amuse you with the speculations of medical philosophy ; contrast the past with the present, in the state of medical literature and in the requirements of medical men ; or I might lead you in the varied and attractive fields through which our art has progressed ; but I turn from these to a subject having directly a practical bearing upon our profession, and eminently useful in its results to the public. It is **THE IMPORTANCE OF MORTUARY STATISTICS.**

If medical science has progressed in the various means adduced for the cure of disease, that branch of it which aims at the promotion and preservation of health has made equal advancement. The use of the silver suture for holding in coaptation wounds of a peculiar nature has been tested and approved. The advantages of anæsthesia have wrought a new era in surgery, and where surgery has interposed to save life, scientific mechanism has restored beauty of form and elasticity of step. The light of pathology has revealed accuracy in diagnosis, while therapeutical agents have gained greater certainty from their more perfect preparation. These various means have co-operated as a systematic whole to prolong by one-fourth, the period of life ; to lessen by one-third, the duration of disease, and to make its existence more enduring. To no one measure is it necessary to ascribe precedence or to withhold from any its due importance. Their results are deduced as causes follow effects, but the truth of these results are ascertained and proven only from mortuary returns. It is difficult to fix a standard by which their value can be fully estimated. They spread before the eye of the medical or political economist the chart of disease, with the shoals and rocks against which human life is wrecked. They stand as lighthouses and buoys to point out the sources of danger. They incite to the

study and application of those physical laws by which mortality may be diminished, and to the perfection of a government which within itself seeks as truly to protect its subjects against the insidious pestilence as against the open foe.

Mortuary statistics are valuable as a stimulus to sanitary measures.

In illustration of the truth of this assertion, I propose to glance hastily at what has already been accomplished by their means. Sanitary science, for such is that philosophy which has for its object the perfect understanding of the laws of health and the prevention of disease, opens an expansive field for investigation. It defines the laws by which certain diseases are governed; it traces them in the course of their extension, and institutes the means for their control and extermination. Experience has already proven that no inconsiderable number of diseases may be expelled from their prevalent localities; and the broad principle has been enunciated "that it costs more money to permit disease than to prevent it."

The attention is arrested by the increased ratio of mortality in densely populated sections; and that here the greatest danger lies, is seen from the fact that the native Indian roaming through his forest home, lives to advanced years, and dies from natural decay, while those who crowd the lanes and alleys of the city become a prey to numberless diseases, and at length yield themselves victims to a premature grave.

Investigations have been made both in London and Paris to ascertain the effect of density of population upon health, and the conclusion reached that life and health depend upon laws which we can understand, and that "the circumstances in which a man lives may be modified to a great extent with a view to promote his organic well being and preservation." The same induction is expressed in a report to the legislature of Kentucky. The author says with St. Paul, that it is appointed unto men once to die, but there

is no inexorable law which compels the one-half of those born in Kentucky to die before they attain their twentieth year, as the returns at present indicate.

Sanitary measures then, are based upon the principle that the excess of disease and mortality in densely populated towns have adequate causes, and that to a great extent these causes may be known and removed, and that they have their origin in dead and decomposing vegetable and animal substance — or in impure air, thus arising. This subject, which for a very long period has occupied the attention of the profession and civil government not only in Great Britain, but on the continent of Europe, is now eliciting interest in several of the states and larger cities of the Union. Mortuary returns are required by the laws of Vermont, Rhode Island, Connecticut, Massachusetts, New Jersey and Kentucky. The sanitary measures that have followed, consequent upon the facts revealed by such statutes, have made Boston one of the most healthy cities in the Union, and Providence, containing a population of fifty thousand, so far as comparison can be instituted, the healthiest city in the world. Under the very able management of Dr. Edwin M. Snow, the sanitary regulations of Providence have within a few years advanced to a remarkable degree of perfectness. Zymotic diseases have greatly decreased and, within a period of twenty-two months, closing with 1857, there had been no death from small pox, and only one or two cases of varioloid reported; and during two years there had been no death from "infantile diseases." Its ratio of mortality in 1857 was one in fifty-four; while that of New York was one in twenty-seven. The only epidemic that had prevailed was influenza, which, though severe, added nothing directly to the mortality.

The possibility of excluding small pox from any community by vaccination, and at a suitable time by re-vaccination, is a question upon which there would seem to be no room to doubt. The experiments made as early as 1824 in

Prussia, and since confirmed by similar results obtained in some of the German states, demonstrate the problem conclusively. Out of forty-four thousand re-vaccinated during a period of five years only one individual contracted small pox, although the disease extensively prevailed. With this important and conspicuous truth before the eyes of the profession, and the civil authorities, it is shown by the mortuary returns in the city of New York for the first six months of 1858 that there were four hundred and twenty-five fatal cases of small pox. With an average fatality of one case in ten, there must have been four thousand two hundred and fifty cases in the city within the short period of six months. New York is the ulcerous spot, as distinguished sanitarians believe, from which seven-eighths of the cases that occur throughout the State arise. It is sufficiently demonstrated that the disease can be eradicated, and its extension over the country by every avenue that leads from the city, effectually prevented.

We are appalled when a scourge like cholera sweeps over the land and terminates the lives of thirty thousand human beings; but we seem insensible to the fact more appalling that every year destroys a greater number from fevers, which proper regulations might to no inconsiderable extent obviate.

Another exhibition shows the loss of still-born children in the city of New York to be more than two thousand each year, occasioned partly by the criminal practice of procuring abortions, and in part by the vitiated health of mothers, which prevent them from carrying their children to the full period of gestation. In both cases the remedy is in a good degree within the reach of wise legislation.

The cellar population of New York — less than that of Liverpool, is estimated at twenty-five thousand. Into many of these domicils the sunlight never penetrates, and the pure air never gains access. It is in such places that disease festers, and its poison is disseminated to the destruction of

life : such living—rather such attempts to live—in violation of natural laws is a criminal experiment and should be prevented by sanitary restrictions ; for, says an experienced writer, “however graciously God may deal with the heart, all our experience proves that he will never pardon stomach, muscles, lungs or brain.”

The law punishes the man who by an immediate act deprives his fellow of life ; but it will allow him to rent to his neighbor a damp cellar for a residence, in which the principles of vitality are excluded—a man-trap where the head of a family and every member of it are exposed to influences that deprive them not only of their earnings, but of health, and slowly of life, or where the inroads of disease are ingrafted upon the constitution to be reproduced in other generations. The public authorities arrest a man for crime, and then criminally consign him to a prison which, in many instances, is but a hot bed for the development of disease. Sanitary science should interpose its influence to prevent in any case the deprivation of health, and we as its expounders have the work to perform. But are we not too indifferent, too willing to let the subject alone ? The duties that impose and enforce requisite measures are irksome, and we lack enthusiasm to incite us to the exertions they demand.

Another feature indicated by mortuary returns, is the average duration of life, to which sanitary measures add. Upon it most important calculations are based. It opens the subject of life assurance, its benefits to the community, and the influences that react in the springs of commercial enterprise, but upon this point I will not enlarge.

Nor less grave are these results as affecting the growth of cities. The wealth of a state consists in the life and health of its citizens, and in proportion as they enjoy the latter, is the former valuable to themselves and the state. The axiom is true in its application to cities. The saving of five thousand lives—the estimated number sacrificed in the city of New York every year—is an item of surpassing

significance, whether computed in the important light of natural increase of population within two or three generations, the vast labor expended by such a population, both mental and physical, in their inventions, their discoveries, their works as artizans or manufacturers, or in their influence as scholars and philanthropists. The sacrifice just referred to, which proper sanitary regulations might avert, in the accomplishment of civilization, is a mine of infinite wealth wasted.

There is also a system for calculating in decimal value the loss accruing to a state or city in the death of a single individual. The calculations, however, admit of some variation. If sold under the hammer in a southern market the average value is about four hundred dollars per head !

The estimate of the late Horace Mann, whose conclusions are admitted as authority, is five hundred dollars ; but the venerable and accomplished Dr. Stevens, of New York, several years since, estimated the value of each individual at seven hundred and fifty dollars. I believe the principles of life assurance fix a higher value. At the medium rate of computation the yearly loss to the city of New York in the sacrifice of five thousand lives, would reach nearly four millions of dollars. The expense for sickness and burial, by an applicable rule, would make an equal amount.*

From the incorporation of Albany, a century and three-quarters ago, there exist no records by which may be ascertained the character of the diseases that have continually been depopulating it. Full as it is of historic interest, abounding in testimony as it does to the influences that

* From the "Proceedings of the Third National and Quarantine Convention," which I have received since this address was delivered, I find the estimated cost of avoidable sickness and death, to the city of New York, is thirteen millions of dollars, with an effect upon the happiness and morals of the people, which can neither be reckoned in figures nor expressed in words. The estimated loss to the single State of Massachusetts is \$93,000,000 annually, for premature deaths of persons over the age of fifteen years,

have operated in giving direction to the State and National government; unfolding resources for the gratification of antiquarian research, it affords no possible information to the student who would trace with its growth and increasing prosperity, the origin and progress of diseases incidental to its climate, with their various types and modifications. It does not, indeed, excite our surprise that such has been the condition of our intelligence, but we may justly inquire why this condition continues when the value of statistical science has not only aroused the attention of the philanthropist, but pressed its importance upon the interests of the state, and in the value of mortuary returns made an earnest appeal to those of our profession.

Let the question be asked if with the changes incident to our climate, within our own city, pulmonary diseases have decreased, or if the ratio of mortality is less within this limit than in cities around us, or what is the relative comparison with its fatality in other cities, and we have no data by which to solve the problem.

Nor are we more familiar with the mortuary results of either eruptive or epidemic diseases. This is a point upon which we are frequently appealed to as conservators of the public health, but upon which any knowledge we generally possess, is at least empty and unsatisfactory to ourselves. The epidemic of the last year fully confirms this assertion.

To the objection that mortuary statistics if known could add nothing to the skill of conducting an individual through the various stages of any malady, a reply need scarcely be urged. I should be unwilling to believe that the objection could find an honest advocate within sight of an academy where the science of medicine is taught, in which so many of us were educated, and under whose seal scores of young men yearly go forth inspired with zeal for the principles of our art. The statute or ordinance by which such information is gained and made subservient to our use, must have its origin in the medical profession, and be executed by the

influence of its energy. Their results affect, as we have shown, not only human life, but the prosperity of a community, and are an index to the efficiency and enterprise of its medical faculty.

The position that Albany sustains as the Capital of the most important State in the Union — its being the seat of a University and a Medical School, and the center of one of the largest Medical Societies in the country, all conspire to require that its laws relating to hygiene and mortuary statistics should be so perfect that in their results they shall bear favorable comparison with those of any city on the continent. These results may be secured through the agency of the members of this Society, either in their individual or corporate capacity. It is not that we are lacking in enterprise to secure these objects, but that our attention has not hitherto been turned in this direction.

Disease has lessened in some portions of the city at least one-third — I speak without figures — and there has been, I apprehend, a corresponding diminution in mortuary results, effected by the introduction of a full supply of pure water; but in nothing are the interests of Albany more neglected than in its sanitary measures. It has no medical police. Its Board of Health has no vitality. The laws of health are grossly violated. Slaughter houses are allowed within the city limits, and every wind blows the foul odor of their unabated nuisances over our population. There is no sufficient regulation for the removal of garbage. Privy vaults are allowed to remain reeking with filth, and exhaling sickening effluvia. Stagnant water evaporates in some of our streets. Ponds, in which are cast dead bodies of every description, from horses to still-born children, are left undrained; and not unfrequently the carcasses of dead animals putrify and rot in the streets unremoved. Our most public thoroughfares are made filthy by the daily droves of cattle and swine. Cellars, dark, damp and unventilated, are inhabited. Stables in the most disgusting condition are

on our very borders. From all these, and other sources, the poisoned miasma arises and settles upon our unguarded people. They die and are buried, and no mortuary statistics remain to warn others against these evils. The body politic may shrink from such testimony, but it is true, and their laws do not interpose to prevent and make it otherwise.

We may thank Heaven that we have pure air above us, that the falling rains sometimes wash our streets; the magnificent river rolling at our feet receives and bears from us their infectious accumulations, and the current winds sweeping along the beautiful vallies of the Mohawk and Hudson, drive away the poisoned air from which we should otherwise die. As a community, we have not indeed suffered from the inroads of disease as other cities have suffered, and as we might justly enough have expected. But let us not rest on, too securely; let us rather take warning by the fatal consequences of neglect.

Under the resolution of Dr. Rogers, to appoint special committees, I have instituted a committee on Public Hygiene, and one on Mortuary Statistics for the city of Albany, and I can but hope that gentlemen who have been assigned to these committees will enter upon the duties they involve, with an unwavering determination to give our goodly city, so propitious in situation and so favored by circumstances, a reputation for exemption from mortuary record, equal to that enjoyed by the venerable town of Providence, or any city in the world. This may be attained. The work, however, is one of vast magnitude, and includes problems of the greatest interest to humanity. Its accomplishment will be in the unremitting labor of years; but the field is inviting, the labor attractive, and the reward is in the consciousness of bestowing upon humanity lasting benefits.

There is a natural diffidence on the part of young medical gentlemen—I myself have experienced it—that induces a hesitancy about reading their productions before a learned

medical society ; lest those who have greater experience in the practice, as well as those who have more extended research in the science of medicine, and who are more accomplished in its literature, should regard them as productions of no special merit, and as adding nothing to the already accumulated mass of professional knowledge. It has happened from such causes, real or imaginary, that an incubus has rested upon other societies, and it may be well to question if such influences have not operated to quell an ardor in our own, the encouragement of which would have at length resulted in good to the cause of that science in which we should have a common interest. Admit that it be true, then, that the efforts of those less experienced are wanting in purity of style and steel-like polish of thought, they may nevertheless possess the roughness of facts, and be as unpolished as the flint ; yet, like flint in contact with steel, they may wake the fires of matured genius. Each step in scientific development is in itself valuable, however unpretending the source from which it is disclosed. With this thought, let us hope that the junior members of the several committees just appointed will engage in the various investigations they involve without reserve, fully believing that however familiar and unimportant the reports they may present may be regarded by a few, they will nevertheless have a practical value that will give them interest with the majority, and they will certainly relieve our meetings from a discreditable barrenness. For these reports a free discussion and a liberal criticism should be courted, with the feeling that, as the latter stimulates the pen of the poet and kindles the thoughts of the philosopher, so it will incite the student in medicine to thorough and diligent research.

It is a subject for congratulation, gentlemen of the Society, that the closing year finds so large an accession to our unbroken ranks. But while we miss none from our immediate number, there are those present who will not forget that another of the luminaries of our professional

literature has become dim. This is neither the time nor the place for his eulogy. Yet from the fact that, for several years he was not only a resident of our city, but occupied a seat in this body, the senior members who were associated with him, and the junior members who have known him through the productions of his pen, will each accede to the propriety of a passing tribute to his memory.

The late Professor William Tully was of New England birthright, and an alumnus of one of its venerable literary institutions.

Having completed his classical education at Yale, he became a pupil in medicine of a distinguished philanthropist, an eminent physician, a bold and skillful surgeon, a man no less distinguished in the history of American surgery, than in the history of American philanthropy; a gentleman of social and refined cultivation, a student ardently devoted to every branch of his profession, and diligently engaged in developing new spheres for its usefulness. I refer to the late Dr. Mason F. Cogswell, of Connecticut, one of the brightest names that adorns the American medical profession.

With an enthusiasm for learning, inspired by the example and precepts of such an instructor, young Tully made rapid advancement in every department of medical and kindred sciences. He became familiar with botany, not only versed in the philosophy of chemistry, but a practical analytic chemist. He became proficient, also, in mineralogy; an accurate linguist, he made medical philology a favorite study, and an evidence of his attainments in this branch of science remains in his contributions to Webster's Dictionary. In the departments of botany, anatomy, physiology, medicine, and in some parts of natural history, Dr. Webster was aided in the preparation of his great work by Dr. Tully.

For the science of mathematics, Dr. Tully had no love; on the contrary, he seemed to have an aversion for angles

and figures, and a dislike for almost every form of arithmetical calculation, but upon popular subjects he had a general education, and a peculiar feature of his mind was to acquaint himself definitely with whatever came before him for investigation. He was familiar not only with the general outlines, but with the minute details of his subject. His conversational powers were rare, and he displayed even in social life great extent and variety of learning. He was a thorough medical scholar, studious from early life, always methodical and persevering. He carried in his pocket slips of paper, upon which he wrote down at the instant every item of knowledge which he could gather bearing upon his favorite topics. These were arranged at a convenient time, so that he could always lay his hands upon them, and at leisure the fragments were wrought into distinct essays.

Dr. Tully occupied a professorial chair in the Vermont Medical College sixteen years, and in the Medical Institution of Yale College fourteen years; thus thirty years of his life were devoted to instruction in the departments of theory and practice of medicine and materia medica. His commanding presence, his full voice, and the interest with which he invested his theme made him a popular lecturer, and he gained admirers from every class. He was a clear thinker, a cogent reasoner, a bold and vigorous writer, holding opinions strictly his own — opinions that were deduced from careful reasoning and close observation. He combined the elements of a severe critic, and treated men and books with occasional impolitic severity. He refuted the opinions of authors without hesitation, or he received and amplified them by his own profound learning, enlivening his argument at times by the pungency of his wit. He observed the operations of therapeutical agents minutely, and was definite in his ideas of the practical value of each. He investigated his cases with great patience, and adapted his prescriptions with clear, correct judgment; but an arbitrary

manner, the tenacity with which he adhered to his own views, and his unwillingness to conciliate the prejudices of his patients—characteristics which might have been admissible in the surgeon of the army or navy—may perhaps have operated to render him less popular as a physician engaged in private practice. His regard for public opinion was no more courteous than for that of individuals. In his intercourse with physicians he was honorable and manly, though his uncompromising tenets at times made his relation to them uncongenial. From a peculiar idiosyncrasy of mind, amounting almost to a disease, as his associates believed, he admitted but few to an intimate friendship.

In the use of iodine and its preparations he anticipated the doctrines of M. Lugol, at least on this side of the ocean, while other of his views, particularly those which relate to the use of opium, were in advance of the period at which they were taught; to the latter, however, the testimony of the profession, after the lapse of thirty years, favorably conforms. He was the first physician, so far as I know, who used opium as a complete anæsthetic in parturition, and at a date years preceding the employment of chloroform or the practice of inducing anæsthesia in parturient cases.

At the time of the discovery of the proximate principles of Peruvian bark in France, Dr. Tully perceived at once the important benefits that would result from it, and obtained about half an ounce of tolerably pure sulphate of quinine from his first experiment. He, with his colleagues, tested its power in intermittent fevers, and proved its utility one year and a half sooner than it was elsewhere established. It is not an unimportant fact, that he manufactured the first half ounce used in this country, and imported from Paris the first brought hither.

I have no less authority than Dr. Jefferson Church, for saying that Dr. Tully was the most thoroughly scientific, and the most truly philosophical physician that America has yet produced.

But it is as an author rather than practitioner or teacher, that he has acquired his greatest reputation and made his name lasting in the world of medical letters. His "Essays on Fever" comprised in the volume Miner and Tully on Fevers, was published in 1823, and obtained no inconsiderable celebrity. His largest and most important work is his *Materia Medica*. If its classification and nomenclature is not without objection, the author nevertheless evinces the most elaborate research and familiarity with the distinguished writers of the age, and has not failed to display, in the elaboration of his favorite subject, the remarkable originality and power of his own mind.

The most able review of this work is from the pen of his former friend and pupil, Dr. Henry Bronson, who succeeded him in his professorship at Yale. It is characterized by learning and ability, and while Dr. Bronson has not withheld the ordeal of a severe criticism, I may venture his authority in regarding the work of Dr. Tully the most important on the subject that has appeared in our country, or that has been published in our language within the present century. He accords admiration to the vigor and originality of the author's views and to his reasons, which, if not always convincing, are instructive and develop fuller merit the more patiently they are studied. After half a century of indefatigable labors, Dr. Tully died, leaving his favorite work uncompleted; but enough is given to the world to identify him with the medical history of his times as one of the most learned, persevering and industrious of men. Here, let his genius be revered, and his eminent services to our profession be held in grateful remembrance.

The subject I have presented is worthy to engage the noblest talents and the most profound wisdom; it requires patient study and persevering action; it appeals to the philanthropist and the physician.

I have alluded to the teacher and his pupil, both enthusi-

astic in achieving fame for our profession—the one not less in its ordinary duties than in schemes of philanthropy ; the other ever diligent in gaining to it scientific distinction. Here is a field for us to occupy, and worthy examples to inspire us in its labors.

The future of our profession is more than ever hopeful.

“ Its honors with increase of ages grow,
As streams roll down, enlarging as they flow.”

